

William Louis CULBERSON*: *Ramalina siliquosa*
discovered in Japan

ウィリアム・L・カルバーソン: *Ramalina siliquosa* 日本に産す

The maritime lichen *Ramalina siliquosa* (Huds.) A. L. Sm., a species previously thought to be restricted to the coasts of western Europe, occurs in Japan. Specimens morphologically and chemically indistinguishable from European plants of the species were collected on rocks at Hashidate, Yahatan, south of Itoh, Izu Province, Honshu, on 14 March 1969 by Ichiro Sasaki. From this collection I identified protocetraric acid and usnic acid by a recently described thin-layer chromatographic technique (C.F. Culberson and Kristinsson, 1970). *Ramalina siliquosa* appears to be the first protocetraric acid-producing species of its genus known from Japan.

Our knowledge of *Ramalina* in Japan rests primarily upon the careful synoptic account by Asahina (1938, 1939). Asahina recognized 19 Japanese species of *Ramalina* of which two belong to the *R. siliquosa* group—*R. crassa* (Del. ex Nyl.) Mont. (called *R. scopulorum* (Retz.) Ach. in Asahina's paper) and *R. subbreviscula* Asah. Of these two species, the salazinic acid-producing *R. crassa* is doubtless the more common in Japan, as Asahina (1939) indicated. I examined eight Japanese specimens of this species collected since Asahina's study was made and identified salazinic acid in all, both by thin-layer chromatography and by the characteristic crystals with the K_2CO_3 /KOH reagent. The specimens that I studied came from rocks on the coasts of Izu, Kii, Ohsumi, and Hizen Provinces.

The other Japanese species of the *R. siliquosa* group, *R. subbreviscula*, produces divaricatic acid and is apparently very rare. Asahina (1939) knew it from a single locality in Aomori Prefecture, northern Japan. I have seen no specimens of it, but Asahina's photograph and the habitat (seashore rocks) leave little doubt that *R. subbreviscula* is indeed a member of the *R. siliquosa* complex. It is noteworthy that it produces divaricatic acid. Neither this substance nor indeed any orcinol-type *para*-depside are known

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in the European representation of the *R. siliquosa* complex, a group characterized by β -orcinol depsidones (Culberson, 1967).

Although the similarities of the lichen floras of Japan and North America are well documented, apparently very few species of lichens are common both to Japan and to Europe but are also lacking in North America. *Ramalina siliquosa* and *R. crassa* are unusual in that they are examples of species with precisely this distribution, for neither of these conspicuous maritime lichens has been found in the New World.

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References

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日本でハマカラタチゴケ (*Ramalina scopulorum*) と呼ばれている, 海岸の岩上に生育する カラタチゴケ 属地衣を 検討した結果, その大部分は サラチン酸を含む *R. crassa* (Del. ex Nyl.) Mont. とすべきものと判明した。しかし, 伊豆, 伊東附近で採集された 1 標本だけは, プロトセトラール酸を含み, 西ヨーロッパ特産と考えられていた *R. siliquosa* (Huds.) A.L. Sm. に一致する。

正 誤 (Errata)

頁 (Page)	行 (Line)	誤 (For)	正 (Read)
157	4	A ₁	A ₂
157	5	A ₂	A ₁
158	31	<i>Dicranum undulatum</i>	<i>Dicranum undulatum</i>
159	24	茎は 8-10 mm	茎は巾 8-10 mm

Dicranum undulatum が *D. Drummondii* subsp. *elatum* var. *alpinum* の異名のようにになっているが校正の誤りで, 別個の種類である。